

# NATURAL AREAS NEWSLETTER



Issue Number 1

January, 1988

## WELCOME

The creation of this newsletter heralds another commitment by the Department of Forestry, Lands & Wildlife to encourage the development of a strong Volunteer Steward Program for Alberta's many and diverse Natural Areas.

As you may know, Sandra Myers is your newsletter editor and co-ordinator of the Volunteer Steward Program. Sandra brings many years of wildlife and protected areas experience to the job and can provide you with any assistance you require in your role as a Natural Areas steward.

The protection of our natural heritage depends on public support and involvement in the Natural Areas Program. Our staff are dedicated to the ongoing management and protection of these sites. But we need your help. Alberta now has 112 Natural Areas and our staff is not large enough to personally inspect each site on a regular or frequent basis. Your role as a volunteer steward is an important contribution that we value highly.

Honourable LeRoy Fjordbotten  
Minister of Forestry, Lands & Wildlife

## WILDLIFE 87 - A BEGINNING

1987 offered Canadians the opportunity to celebrate the 100th year of wildlife conservation in this country. It was a special year for those of us who are committed to wildlife and wildlife conservation.

Although 1987 has come to an end, Wildlife 87 was really a beginning. For our program it meant the

establishment of 21 new natural areas and substantial additions to an additional four sites. It was the start of our Volunteer Steward Program, a major initiative which will continue to build and improve. It was a year for reflection on the value of conservation and the beginning of a new awareness of its importance.

## VOLUNTEER STEWARD WINS NATIONAL AWARD

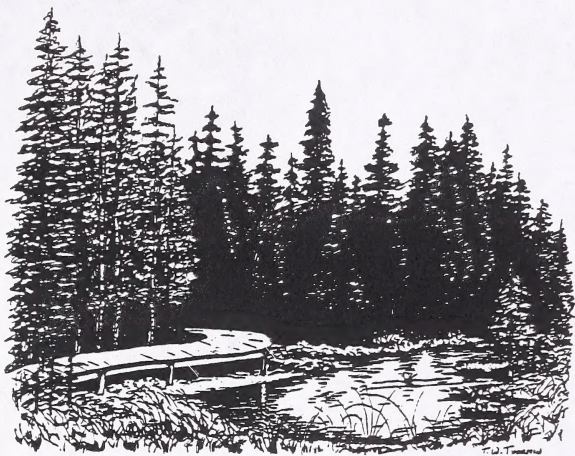
The Wagner Natural Area Society received a national award from the Canadian Council on Ecological Areas for its work in managing and protecting the Wagner Natural Area.

The Canadian Council on Ecological Areas is a national, independent organization with representatives from the scientific community, private conservation organizations and various levels of government. The

objectives of the council are to establish a national system of protected ecological areas and to develop selection criteria and management guidelines for protected areas.

The Wagner Natural Area Society has been managing the site since 1983 and has undertaken several projects including the installation of boardwalks and perimeter fencing, the construction of a self-guiding nature trail and picnic shelter, the publication of a trail brochure and bird check-list and the preparation of a management plan.





*Drawing by Terry Thormin*

This dedicated and energetic group of volunteers is composed of representatives from the Parkland Rural Residents Association, the University of Alberta Botany Department, the Edmonton Natural History Club, the Edmonton Bird Club and the Federation of Alberta Naturalists as well as interested individuals.

## EDITOR'S MESSAGE

Greetings! We hope you find this first issue of our quarterly newsletter informative and helpful in your role as a volunteer steward. We would welcome any general comments or specific suggestions on what you would like to see in further issues. Through the newsletter, we hope to keep you up-to-date on the progress of our various projects.

This newsletter is especially for you and we invite you to share your experiences as a volunteer steward. If you have any short articles relating to Natural Areas or conservation, please send them in. Communication and the continued involvement of concerned individuals will be important for a strong Volunteer Steward Program.

Thanks to you, our new program is off to a good start!

Also, many thanks to the staff for all the time and effort that they have contributed to this newsletter (I will be buying coffee for months!).

*Sandra Myers*

Sandra Myers  
Volunteer Steward Co-ordinator

## VOLUNTEER STEWARD PROGRAM UPDATE

### In the beginning...

The Volunteer Steward Program officially started in August, 1987. It is modelled closely after the successful Ecological Reserves Volunteer Warden Program in British Columbia. In the last four months we have had many enquiries and now have twenty stewards for twenty-six sites.

Volunteer stewards include groups such as the Junior Forest Wardens, Boy Scouts, Girl Guides, naturalist

societies, counties, forest companies, and concerned individuals. Groups or individuals may sponsor more than one site and one site may have more than one steward.

### What's Next....?

We are presently processing application forms. Thanks for your patience; the starting phase of most new programs seems to be a slow process. In February, 1988, an information kit will be sent out to each volunteer steward. The kit will include a site map, air photos, site information, inspection forms, an identification card, a copy of the Natural Area legislation (Wilderness Areas, Ecological Reserves and Natural Areas Act) and other related materials and supplies.

During the next year our objectives are: to actively support our existing volunteers in providing effective management for their sites; to provide assistance and guidance to volunteer stewards in undertaking various projects; to obtain feedback from the volunteers on how the program can be improved; and to meet with as many stewards as possible.

### Where are we heading...?

There are still 166 Natural Areas (designated and reserved) that do not have volunteer stewards. We hope that eventually each site will have one! If you feel that you would be interested in becoming a volunteer steward or if you would like more information, drop us a line or give us a call at:

Natural Areas Program  
4th flr, South Tower  
9915-108 Street  
Edmonton, Alberta  
T5K 2C9  
Telephone 427-5209

We would be happy to have you on board.

## WHAT CAN A VOLUNTEER STEWARD DO?

Good question! Volunteer stewards are needed to OBSERVE, RECORD and REPORT. By the way, that's taken directly from the B.C. Volunteer Warden Program.

We need volunteer stewards to act as the eyes of the Natural Areas Program. If there are any problems with a Natural Area, let us know. Are there abuses occurring on the site? Let us know. If you see something interesting or if improvements are needed, we need to hear from you.

As a volunteer steward you do not have any enforcement role. If you witness any violations, such as the destruction of a fence or tree cutting, call the RCMP. If the violation is wildlife-related, dial the Fish and Wildlife Outdoor Observer toll-free number 1-800-642-3800. And let us know of the incident. For other problems, you can contact our main office at 427-5209. We are open for discussion and value your input.

The minimum commitment we ask of volunteer stewards is that they visit their site once a year and fill in a short inspection report to inform us of the site's condition. We also ask that they put up and maintain boundary signs which we will supply. After that, it is up to you!



# NATURAL AREAS BACKGROUNDER

## Why a Natural Area?

With today's rapid pace of development, it is imperative to protect and conserve public lands with scenic value, unique natural characteristics or diverse biophysical habitats. By preserving these areas for present and future generations to enjoy and appreciate, the quality of life for all Albertans will be maintained and enhanced.

Confused About Reserved and Designated Natural Areas? Well Then,

Read On!

## Reserved Natural Areas

Land with natural features that meet the criteria for selection into the program are usually first placed under an interim reservation, commonly referred to as a protective notation (PNT) in the records of the Public Lands Division. The reservation ensures that any application for an activity requiring a disposition such as a lease or a permit for whatever purpose, is automatically referred to the Natural Areas Program for review and comment.

A reservation can be thought of as a 'flag' in the records to identify a special interest. Depending on the features present on a specific site and the potential impact of the proposed activity, an application for a disposition may be refused, approved or approved with special conditions attached. Thus a reservation is the lowest level of protection for a site and is usually relatively short-term.

## Designated Natural Areas

If a particular site under reservation has a high level of public support and has no outstanding conflicts, a recommendation is made to the Minister to officially designate the site as a Natural Area under the Wilderness Areas, Ecological Reserves and Natural Areas Act (1981). The designation is finalized through the signing of an Order-in-Council (O.C.). An O.C. is a document approved by cabinet and signed by Alberta's Lieutenant Governor. A designation affords a site a much higher level of commitment and support for protection as opposed to a reservation.

A designation is long-term and a site's status can only be changed or deleted by a subsequent O.C. A designation also raises the status of protection by elevating it to the political level. Whereas an application for a disposition for any type of use on a site under reservation can be approved at the civil service level, applications for dispositions on a designated site (O.C.) can only be approved by the Minister of Forestry, Lands and Wildlife, as stipulated in the Wilderness Areas, Ecological Reserves and Natural Areas Act.

It is important to realize that Natural Areas fill a variety of roles and as such are managed on a site specific basis. While one particular site may possess sensitive features such as rare plants, which can tolerate little or no disturbance, another site may have characteristics which make it less sensitive to impacts.

Thus, use and development may be approved if they have minimal impact on the natural features, where such is deemed to be in the best interests of Albertans (such as petroleum and natural gas exploration and development). It should be readily apparent that for those sites which do not have particularly unique or sensitive features, the level of public support for that site will have a significant influence on what actually may be approved to occur on site.

## Why Management Plans?

During the past year, the Natural Areas Program has undertaken the preparation of site-specific management plans in order to identify appropriate types and levels of activities for each Natural Area. Although the long-term goal is to have a management plan for each designated Natural Area, the sheer number of sites (112) and the size of our staff (4 permanent employees), make this unrealistic in the short-term. Therefore, management plans are being initiated on a priority basis, with newly designated sites receiving the highest priority.

The management planning process attempts to involve the public, particularly local residents in the vicinity of the site and, of course, the volunteer steward. Approved plans will guide the long-term protection, use and management of each site.

## Education vs Regulations?

To date the general philosophy of site management is to encourage appropriate activities and to discourage unsuitable, random uses. This philosophy is communicated in brochures, displays and signage and through the installation of gates, fencing and staging areas. This option is preferred over the use of regulations because of the lack of manpower available to effectively enforce any regulation.

Education and the promotion of suitable activities are more efficient and effective in the long-term. By encouraging users to accept responsibility for a site and to respect its natural values, long-term protection will become a reality.

Currently there are no specific regulations that have been implemented under the Wilderness Areas, Ecological Reserves and Natural Areas Act (WAERNA) to control random (ie. requiring no disposition) public use of sites. If there is a conflict or a potential for one such as inappropriate all-terrain vehicle (ATV) use then the management technique usually involves the installation of signs, gates and fencing.

It should be remembered that although there are no regulations under the WAERNA Act, there is existing legislation, applicable to all crown lands that either controls or prohibits activities such as hunting, littering, cutting of trees and the excavation of soil material.

The volunteer steward, by visiting a site occasionally, plays a vital role in the management of Natural Areas. By observing, recording and reporting site conditions and existing and potential problems, mitigating actions can be



taken where necessary to ensure that a site's integrity is maintained.

## MEET OUR STAFF

The Natural Areas Program is small in number of staff members but enormous in enthusiasm. The staff is comprised of:

- Peter Lee - Natural Areas Program Manager and our fearless leader.
- Lorna Allen - Biologist
- John Rintoul - Biologist
- Sandra Myers - Volunteer Steward Co-ordinator and newsletter editor
- Bill Richards - Technician

Look for more information on our activities in our next newsletter.

## NATURAL AREAS STAFF RECOGNIZED

The Canadian Parks and Wilderness Society (CPAWS) recently presented wildlife prints to two staff members of the Natural Areas Program; Lorna Allen, biologist and Peter Lee, Manager. The prints were presented in recognition of their contribution in establishing new Natural Areas and Ecological Reserves.

The beautiful prints, a beaver and a kingfisher, were drawn by Dierdre Griffiths, a naturalist and talented artist who resides in the County of Strathcona.

Other persons recognized by CPAWS for their contribution included, most notably the Hon. Norm Weiss, Minister of Recreation and Parks, and the Hon. Don Sparrow, Minister of Tourism (was Minister of Forestry, Lands and Wildlife at the time of the awards presentation).

Two staff members of Alberta Recreation and Parks were also presented with awards for their work: Larry Duchesne and Brian Payne of the Ecological Reserves Program.

## UPCOMING EVENTS

April 8 - 10, 1988 - National Wildlife Week Open House, Provincial Museum of Alberta

- wildlife related displays, guest speakers and audio/visual presentations.

## RESOURCES AVAILABLE

1. Directory of Cooperative Naturalists Projects in Alberta:

A Guide To Volunteers for 1987. Contact Geoff Holroyd, Canadian Wildlife Service. Twin Atria No. 2, 2nd Flr. 4999 - 98 Ave. Edmonton T6B 2X3  
- lists and describes volunteer naturalist's projects and gives the name of the project contact person.

2. Conservation Kit: A Legal Guide to Private Conservancy. Environmental Law Centre, 202, 10110 - 124 Street, Edmonton T5N 1P6 (\$14.)  
- comprehensive discussion of the alternatives available and the legal implications, to conserve private land.

3. Environment Views (Vol 8, No. 5, Winter 1986): Alberta's Natural Treasures. Alberta Environment

Communications Branch 12th Flr. Oxbridge Place  
9820 - 106 Street Edmonton T5K 1J6 (free)

- issue devoted to the different types of Natural Areas in Alberta.

## NATURAL AREA PUBLICATIONS

Marl Pond Trail, Wagner Natural Area. - A Guide to Some of Its Plants and Animals. Available from the Natural Areas Program office.

Birds of the Wagner Natural Area. A checklist compiled by Wagner Natural Area Society. 1988. Available from the Natural Areas Program office.

"Close to the Land" A 12 minute audio-visual slide/tape program, available on video cassette, describing Alberta's Natural Areas Program. Available on loan (free) from the Natural Areas Program office.

A portable display unit on the Natural Areas Program is available for loan (free) for organizations and individuals to use at meetings and public functions.

Resource materials, including a library and herbarium are available for use at the Natural Areas Program office 9915 - 108 Street, Edmonton. Please drop by when you are in Edmonton. It is advisable to phone ahead to ensure that someone will be available to assist you.

Natural Areas Brochures Currently Available

Beaverhill	General Program	Milk River
Beehive	Innisfail	Riverlot 56
Bilby	Kleskun	

## OTHER ORGANIZATIONS

Alberta Native Plant Council, Box 4524, Postal Station South Edmonton, Edmonton T6E 5G4

- non-profit society with the objective of increasing the knowledge about Alberta's wild flora and preserving this resource for the enjoyment of present and future generations. Individual membership is \$15.

Natural Areas Association, 320 South Third Street, Rockford, Illinois, U.S.A.

- U.S.-based international non-profit society actively involved in the identification and management of natural areas and elements of natural diversity. Individual membership is \$15 U.S., includes quarterly journal.



The main objective of the Natural Areas Program is to maintain the sites in a natural state. There is no limit to the types of projects that can be initiated. Of course not all projects will suit all sites; or suit all stewards for that matter. For those interested in natural history, our records on the species inhabiting a Natural Area can always use updating. Another useful project could be a breeding bird survey, which could be tied into the Alberta Bird Atlas project and the breeding bird census.

Here are some other suggestions:

- develop a comprehensive plant species list for the site
- make observations on flowering dates and tie into the phenology survey of Alberta
- develop a vegetation map for the site
- relate animal/bird species present to the vegetation map
- institute a bird banding project
- keep detailed bird observations and tie into the Audubon Society publication on American birds
- map out any rare species or special/sensitive features
- monitor rare or sensitive species
- monitor weed invasion

There are several projects related to site management that could be tackled. Again, not all projects will be suitable for all sites, but here are some ideas:

- fence all or part of the area (we supply the materials)
- have a garbage clean-up
- plan and develop a parking area
- plan and develop a trail system
- reclaim disturbed areas
- pull weeds

Perhaps your main interest is environmental education. Some projects that you could consider are:

- develop an interpretive trail
- write an interpretive booklet for the trail
- develop an information booklet that could be used by leaders taking groups to the site
- develop an environmental education package complete with background information on the site and including ideas on activities for groups such as Scouts/Girl Guides or schools
- volunteer to act as a tour guide for school groups

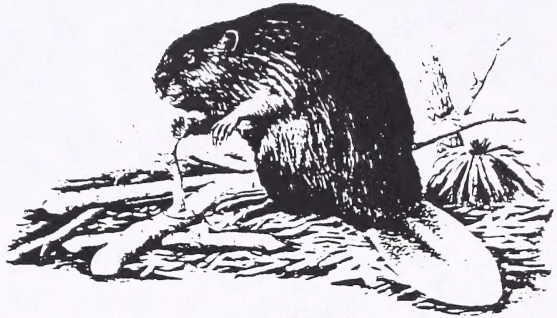
I am sure there are many other good ideas out there. If you have some suggestions, give us a call. Or better still, drop us a letter so we can use it in the next newsletter!

## NATURAL HISTORY NOTES

### The Canadian Beaver

The beaver (*Castor canadensis*) is a semi-aquatic mammal and is the largest of the North America's rodents. It has an average weight of 16 to 27 kilograms (35 to 60 pounds) but has been known to reach weights of up to 45 kilograms (100 pounds). A large beaver may be 1.2 meters (four feet) long, including its 30 to 36 centimeter (12 to 13 inch) tail.

Males and females look alike and are difficult for even trappers to tell apart. The beaver's fur is very



dense and consists of fine underfur about 2 centimeters (3/4 inch) in length and an outer layer of heavy guard hairs of about 5 centimeters (two inches) in length.

The beaver inhabit slow-moving streams, lakes, rivers and marshes where trembling aspen, willow and shrubs are readily available. While usually found in forested areas, it is also found in prairie streams if there is an adequate food supply. It is well adapted to an aquatic life, with exceptional lung capacity and flap valves on nostrils and ears. Its lips close behind its incisors so it can even chew under water without getting water in its mouth. To define its territory, the beaver builds mud mounds and marks them with secretions from its castor glands, for which it is named.

The beaver is a remarkable animal; not only does it alter its environment to meet its need for survival, but it does this in ways that show skills as tree cutters, hydraulic engineers, land developers and house builders. Above all, the beaver requires water deep enough to provide escape from predators to allow for safe under water entrance to lodges or burrows and to permit storage of winter food beneath the ice. When dams are required to impound water, the beaver makes them from sticks, grass, mud and stones interwoven in such a way that they can withstand considerable water pressure.

There is little known about the breeding habits of the beaver, mainly because of its aquatic habitat. Females breed after the age of two. The males are monogamous, mating for life. Mating occurs in January and February and the young are born between April and June. A litter may contain three or four kits, though a range from one to nine is not uncommon. The beaver colony is normally made up of an adult pair, the kits and yearlings of the previous year.

Thought to be on the way to extinction at the turn of the century, the beaver is doing well in Alberta today. Large regions of the province were without beaver during most of the first half of this century but sensible conservation programs have resulted in a dramatic increase in numbers. Beaver can be found in many of our Natural Areas, providing excellent opportunities for you to study this fascinating animal and the effects it has on its environment.



## MOUNTAIN LADY'S SLIPPER ORCHID (*Cypripedium montanum*)

This attractive orchid is endangered in Alberta, meaning that it is a species threatened with extinction throughout all or a significant portion of the province. It is restricted to small, scattered populations in the southwest and is endangered because it has specific environmental and reproductive requirements.

Exact environmental requirements include moist, sheltered sites and infection by a soil fungus for seed germination and growth. The shape of the flower inhibits self-pollination and reproduction is dependent on bees for pollination. It appears bees receive little food reward for visiting these flowers so other sources of food must be present nearby. Reproduction levels are low; seed capsules are produced only a quarter of the time.

How can I recognize the flower...?

This orchid is usually 20 to 50 cm tall with a single stem. It has four to six broadly oval, clasping leaves with prominent parallel veins.

In June or July, there may be up to three flowers per plant; each flower is made up of three petals and three sepals. The sepals are 4 to 6 cm long. Two of the petals are lance-shaped, purplish-brown in color and spirally twisted downward. The third petal forms the pouch or slipper. It is white, puckered around the opening and two to three cm long with purplish veining on the outside near the base. Occasionally it has purplish spots on the inside.

How can we save this plant...?

The greatest threat to this strikingly attractive plant is picking and trampling. Flowers should be left alone so that they can set seed for the next year's crop. Transplanting orchids is usually unsuccessful. They are slow to adjust to changes in their environment and many have very special soil requirements. Disturbances (by trampling, etc.) to the roots of these fragile plants often causes attack by fungus and ultimately the death of some plants.

Help us protect the Mountain Lady's Slipper. Remember, picking a wild flower is always a bad idea, they should be left in the wild for everyone to enjoy. (Background information researched by K.E. Wilkinson).



Drawing by John Maywood